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Fig 12D shows a compressor and decompressor connected to a communications channel.

Fig 13A shows elements of a compressor.

Fig 13B shows an embodiment of an encoding circuit.

Fig 13C shows a generic pixel sub-sampler.

Figs 13D through 13J show embodiments of pixel sub-samplers.

Figs 14A through 14C shows embodiments of a machine element for variably altering the number of bits. 14C

Fig 15 shows elements of a decompressor.

Fig 16A shows elements for setting width, height, frame rate, brightness, and contrast which are variably altered by a receiver.

Fig 16B shows elements for setting the number of pixel bits which are variably altered by a receiver.

Fig 17 shows a lossless compression step for further compression an encoded data buffer.

Fig 18 shows images being enlarged by stretching.

Reference Numerals in Drawings

100	compression steps	110	sub-sampling step
130	encoding step		
140	encoded data	150	decompression steps
160	decoding step	180	image reconstitution step
200	32 bit pixel value		
202	blue channel	204	green channel
206	red channel	208	alpha channel
210	24 bit pixel value	212	blue component
214	green component	216	red component
220	RGB averaging diagram	222	blue value
224	green value	226	red value
228	averaged value	230	blue selection diagram
232	blue instance	234	green instance

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1430	36-bit to variable bit sub-sampler
1440	24/36 bit variable bit sub-sampler
1450	second selector
1460	selection logic
1510	decoding circuit
1520	decoded pixel values
1530	decoder pixel index
1540	image memory
1600	transmitter
1610	receiver
1615	setting control path
1620	frame sub-sampler
1621	path 1621
1630	selected frame
1632	pixel from frame
1640	transmitter pixel sub-sampler
1642	path 1642
1650	run length encoder
1660	settings
1661	brightness
1662	contract
1663	height
1664	width
1665	frame rate
1670	frame selector
1675	frame select indicator
1680	number of pixel bits setting
1700	run-length encoding step
1710	run-length encoded output
1720	further lossless compression step
1730	further lossless compression output
1800	unstretched frame
1810	enlarged image
1820	stretching step

1470 selection signal

DESCRIPTION OF THE INVENTION

Fig 1–Compression and Decompression Steps

Fig 1 illustrates a sequence of compression steps 100 and a sequence of decompression steps 150 of the present invention. The compression steps 100 comprise a sub-sampling step 110 and an encoding step 130. After completion of the compression steps 100, a stream of encoded data 140 is output to either a storage medium or a transmission